## Big Science

Lee Younker

hen I first showed up at the Lab for an interview, it was in the mid-1970s. I had been in challenging Ph.D. defenses, but I'd never been in a place that was quite as intellectually challenging as the Lab. You'd go in a room and start talking to somebody and you'd answer a question. But then there'd be a follow-up question, and then another question. This can be a hardnosed place, but I didn't feel that. They were just simply curious people.

I vividly remember walking into a room after having given a seminar. Two or three people came in, and one of them asked, "If you were going to model the whole Earth, how would you do that?" Trying to excuse myself, I muttered something back like, "I'm a geophysicist, and I was talking about a particular part of the Earth, like how volcanoes worked..." But he didn't ask, "How would you model that little part of the Earth?" He asked, "How would you do the whole thing?" The next thing I knew, people were up at the board, writing and asking questions: "What would go into it and what wouldn't?" "How would you simplify that?" and "What would the boundary conditions be?" This is the way people out here think. The Lab tends to accumulate people who ask those very big questions. Sometimes, they aren't answerable. And sometimes, it's too soon. And sometimes you're a little foolish. But that doesn't stop people here.

## The Early No-Smoking Policy

Max Biggs

he Medical Department shared an old barracks building on East Avenue with Security in those early days. We shared a waiting room. In the middle of that room was a large cigarette dispenser. I objected, saying that we should not dispense cigarettes in the Medical Department. They accommodated my objections by moving the cigarette machine over to the Security half of the waiting room.

## Just Visiting

Sharon Rector

started working at Livermore on Valentine's Day, February 14, 1980. I was hired from the outside world to work in the Laser (Nova) Department. My first office space was located in Trailer 3724. Everyone worked long and hard hours because Nova construction was a main focal point at the Laboratory at that time. One summer day, someone yelled out, "Look at that goat!" It was headed for

one of two doors located in our trailer. Of course, everyone had to gawk at the goat as it headed our way. Someone mentioned that we had better shut the door so it doesn't come into the trailer. I thought it would be fun, maybe even a stress reliever to invite the goat into our working quarters—even thinking to myself, how difficult could it be to guide a goat from one end of a trailer to another?

That darn goat visited every single office. My boss let me know that if the goat decided to take a bathroom break, I would be the one cleaning the mess up. That statement inspired me to hurry the goat along even harder than I had been. Well, the goat and I survived our adventure without leaving anything behind, and it gave me a much needed break. I thought to myself: Would this have ever happened in Oakland or San Francisco?

"You are what you are at this laboratory. People take you in stride as to what you do and what you're capable of doing. It doesn't matter whether you're a Ph.D. or an M.A. or an M.B.A. or a B.S. or whatever; they take you as you are and forget the labels."

Milt Finger

## Getting to Livermore

Bruce Tarter

The Lab's unique culture wasn't enough to convince this college graduate that he should stay.

hree times during my career, I have "entered" Livermore as a new employee, and each time, I was exposed to some of the oddities and peculiar attractions of the place.

I first arrived at the Lab in the summer of 1962, when I traveled west from New York to accept a summer job after my first year in graduate school. I had no idea what went on here, nor did I particularly care. But I wanted something technical in the Bay Area, so I could both learn something and visit my former MIT fraternity brothers, many of whom lived in the area.

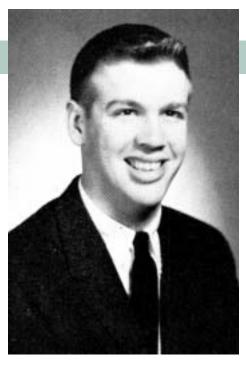
After four long days in my Sunbeam traversing the country, I cruised into Livermore and was dumbfounded by the solid brown fields (being from the east, I had no idea it didn't rain year-round in California). What was most striking, however, was a large bill-board in the middle of one of the fields saying, "Re-elect Pat Brown Governor and Keep California Green." After learning that the state was embroiled in one of its periodic fights over water rights, it made some sense, but the incongruity of the message as epitomizing California has stayed with me ever since.

The summer itself was wonderful. I had a terrific boss—John Hiskes—and worked in Magnetic Fusion Energy with Dick Post, even then the spiritual leader of the effort. I learned a little about computers, but mainly worked in Building 315 in a room mostly populated by desk calculators and an air conditioner of incredible noise and low cooling power.

All in all, it was an idyllic experience. The Lab took care of finding housing. I discovered the wonders of Mines Road for automotive and female encounters, went to the Alameda County Fair, and published my first real physics paper (with Hiskes). The Lab even paid my way to an American Physical Society meeting to present it the next fall.

Armed with this experience, I decided to repeat it the next summer. Upon arriving at the Lab, both Sid Fernbach, the head of T Division, and I were surprised to learn that Hiskes was leaving for a sabbatical in England. Sid asked what I wanted to do. I said I could continue by myself on the same lines as the previous summer. He said fine, but why not also look at some relevant weapons stuff for Gary Corman? So at 23, I embarked on a self-directed few months, which to me still typifies why the Lab has always been such an attractive place to be.

Because Hiskes was gone, there was no office arrangement. Sid suggested that I use his office for the first several weeks, since he



Bruce Tarter.

was going on vacation. Consequently, every day, I would wander in around 10 or 11 (you have to adopt theorists' hours early in life), walk past the cluster of division secretaries, and sit at Sid's desk with my feet up, thinking big thoughts. People who didn't know he was on vacation would come by, and I would say hello and strike up conversations. So I lived a very amusing life as a very junior surrogate for the division leader. As before, it was a great summer, full of publishing papers, learning weapons theory, and touring all of my MIT friends' places in Tahoe, Monterey, and the like.

Still, these experiences weren't enough to convince me to come back after I received my Ph.D. in 1967. I debated among many possibilities, including the Lab, but eventually decided to work for an aerospace corporation in the Los Angeles area. A few months later, however, it was clear to me that it had been a mistake, and I reapplied at the Lab. I came up for interviews, which by that time included Edward Teller as a mandatory and central part of the process, and also a very young version of Lowell Wood and other Edward protégés.

Somehow, it went all right, and I received a letter from Edward a couple of days later offering me a job to work "half-time on astrophysics and half-time on astrophysical engineering," finishing with the cryptic phrase, "I am sure you know what those words mean." I quickly called Personnel to accept the offer, only to learn they knew nothing about it because Edward hadn't bothered to tell them. Eventually they caught up, sent me an "official" letter, and I came to the Lab in November 1967.

Although other opportunities arose over the next 35 years, I didn't want to risk the uncertainties of getting back in the door if I left again. So I have stayed here ever since.